

examined to see if it could be applied to the analysis of computer schemes.

On computer systems with many external interfaces, it has been found that theory could not be applied directly because:

- (a) to reduce the calculations to manageable proportions unrealistic simplifications would have to be made,
- (b) the statistical distribution of events in such schemes was of a type not handled by the published theories,

(c) the theory did not provide information on the computing characteristics during bursts of activity after a system disturbance (non-equilibrium points).

6. Acknowledgements

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Short notices

The International Directory of Computer and Information System Services 1974, 1974; 636 pages. (Europa Publications, £8-00)

This directory is published for the Intergovernmental Bureau for Informatics in Italy. In the foreword the Director of IBI-ICC says that the purpose of the book is to help users of informatics to locate computer and information services which are available. It does not seem to have heard of either The British Computer Society, the National Computing Centre or the Association for Computing Machinery, besides listing personnel at companies who left years ago, and some companies that have ceased to exist.

Apart from these minor defects, it has a comprehensive listing of establishments broken down into National Centres (under which appears Computer Power), Educational and Training Institutions, Universities and Colleges, Government Establishments or Agencies, Research Institutions, Consultants, and Service Bureaux.

ICP Quarterly, a catalog of saleable computer software, published quarterly, \$100 per annum (in UK contact London Information (Rowse Muir) Ltd, Index House, Ascot, Berks SL5 7EU).

A comprehensive catalogue, in two volumes, giving systems related software (Volume 1) and applications software (Volume 2).

Information is presented under several headings, e.g. program description, alphabetical index, hardware index, etc.

The October 1974 edition is being placed in the BCS Library.

New Journals

International Journal of General Systems, edited by George J. Klir, published by Gordon and Breach Science Publishers. Contents of Volume 1, Number 1 (1974): Editorial, Obituaries: W. Ross Ashby and Ludwig von Bertalanffy.

Information flows in hierarchical systems, Roger C. Conant
A theory of system complexity, Arthur E. Ferdinand
Toward integration of two system theories by Mesarovic and Wymore, Sirajul Islam

Human Knowledge, The Role of Models, Metaphors, and Analogies, Danielle Mihram and G. Arthur Mihram

On the Design of Stable and Reliable Institutions, Robert Rosen
Economics and General Systems, Kenneth E. Boulding
The General Systems Depository, its Mission and Operation, Joseph V. Cornacchio

Engineering Optimization, edited by Andrew B. Templeman published by Gordon and Breach. Contents of Volume 1, number 1 (1974):

Engineering optimization—scope and aims, Andrew B. Templeman
The application of optimization techniques in the professional practice, V. P. Lane

The optimum design of concrete structures, D. Bond
Optimality conditions for trusses with nonzero minimum cross-sections, Geir A. Gunnlaugsson

Heuristic approaches to road network optimization, A. D. Pearman
The CIRIA optimization study of sewage treatment, K. Bowden and D. E. Wright

Michell framework for uniform load between fixed supports, W. S. Hemp